Colorado State Conservation Board 2007 Matching Grants Project: Shavano Conservation District: Colorado River Salinity Reduction

What natural resource problem(s) did the project address?

The Colorado River begins in the Rocky Mountains of Colorado and winds it's way through the lower western states to Mexico, providing water to agriculture and urban areas as it flows, and impacting the water supply of almost 40 million people. Federal legislation requires that salinity levels are kept to a certain level in the Colorado River - salinity alters soil chemistry and reduces crop yields or even prevents farmers from being able to grow certain crops at all. It is also expensive to treat high levels of salinity in drinking water. Some irrigation practices can be significant contributors to salinity by mobilizing salts that are in the soil and in 1978 over 1 million tons of salt per year was entering the Colorado River from the naturally high salt concentration areas of Colorado. Since then, the Basin States Salinity Program (seven state program administered by CSCB in Colorado) and the Natural Resources Conservation Service have introduced an irrigation improvement cost-share program to begin to reduce the salinity loading of the river.

The Shavano Conservation district serves parts of Montrose, Ouray, Gunnison and Delta counties in western Colorado. In recent years, they had recognized a few producers in their District were reluctant to complete projects in the cost-share program because of sharp raises in fuel and steel prices following Hurricane Katrina that were not always adjusted for in cost-share rates.

By offering an additional 15% funding where cost-share rates remained low, the District brought the actual cost of implementing improved irrigation practices in line with other years and helped ensure the efforts to reduce salinity in the Colorado River and meet regulatory expectations were not stalled.

What was achieved?

- Three irrigation improvement projects were carried forward and completed, involving 2,200 feet of pipeline,
 2 pumping plants and 2 micro-irrigation filter systems.
- Practices result in a reduction of 357 tons of salt entering the Colorado River each year.



A lower damp layer can be seen in this Colorado River bank from which deep water percolation is leaching salt into the river.